

| PRE-APPEAL BRIEF REQUEST FOR REVIEW |                 | Docket Number (Optional) |
|-------------------------------------|-----------------|--------------------------|
|                                     |                 | SCS-124-1142             |
| Application Number                  | Filed           |                          |
| 10/563,056                          | January 3, 2006 |                          |
| First Named Inventor                |                 |                          |
| COMBES                              |                 |                          |
| Art Unit                            | Examiner        |                          |
| 2884                                | C. Igyarto      |                          |

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).  
Note: No more than five (5) pages may be provided.

I am the

☐ Applicant/Inventor

☐ Assignee of record of the entire interest. See 37 C.F.R. § 3.71. Statement under 37 C.F.R. § 3.73(b) is enclosed. (Form PTO/SB/96)


☒ Attorney or agent of record

27,393  
(Reg. No.)

☐ Attorney or agent acting under 37CFR 1.34.  
Registration number if acting under 37 C.F.R. § 1.34

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.\*

☒ \*Total of 1 form/s are submitted.

  
Signature  
Stanley C. Spooner

\_\_\_\_\_  
Typed or printed name

703-816-4028  
Requester's telephone number

January 21, 2009  
Date

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.8. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**STATEMENT OF ARGUMENTS IN SUPPORT OF  
PRE-APPEAL BRIEF REQUEST FOR REVIEW**

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The following listing of clear errors in the Examiner's rejection and his failure to identify essential elements necessary for a *prima facie* basis of rejection is responsive to the Final Rejection mailed August 19, 2008 (Paper No. 20081616).

**Error #1. The Examiner errs in concluding that the claimed "mounting means" is not disclosed in the drawings or described in the specification**

On pages 2 and 3 and sections 3 and 5 of the Final Rejection, the Examiner alleges that the claimed "mounting means" is not disclosed in the drawings and is not described in the written description of the invention. Because this portion of claim 1 is written in means-plus-function form, it must be construed to cover the various embodiments disclosed in Applicants' specification and equivalents thereof (35 USC §112 (6<sup>th</sup> ¶)).

The claimed "mounting means" is disclosed in the specification as providing the functions of "mounting said support frame on a substrate" and "thermal isolation between said substrate and said supporting frame." (emphasis added, claim 1). As shown in Figure 3 and discussed in the first paragraph on page 13 of Applicants' specification as filed, the resonator element 36 is fixably attached to a supporting frame ("suspended portion 32") and there is a substrate (40). The "mounting means" comprises legs 43 which are located mount and thermally isolate the "suspended portion 32" with respect to the "substrate 40" (described on page 13, lines 6 and 7 as maximizing "thermal isolation between the suspended portion 32 and the substrate 40").

Thus, not only the embodiments of Figure 3, but the embodiments of other figures, as discussed in the specification, disclose the "mounting means." However, this is clearly shown in Figure 3 as "legs 43" thereby obviating any objection to the drawings because the mounting means is clearly shown in the application as originally filed. This is also discussed on page 6, lines 20-29,

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further confirming that the mounting means is at least one leg and preferably two or more legs for supporting the suspended portion.

In view of the above, the Examiner's objection to the drawings and rejection of the claims are both based upon his conclusion that the "mounting means 43" is not illustrated in the drawings or discussed in the specification is simply erroneous and should be reversed by the Board on appeal.

**Error #2. The Examiner apparently misconstrues the subject matter of Applicants' claim**

In addition to the Examiner's failure to properly construe the "mounting means," the Examiner appears to misunderstand the other elements of the claim. Applicants' claim recites a resonator element 36 which is fixably attached to a supporting frame 32. The device also includes an electrical oscillator for driving the resonator element into resonance and the supporting frame 32 is adapted to absorb infrared radiation, thereby altering a resonant property of the resonator element. As discussed above, the mounting means mounts the supporting frame, not the resonator, on a substrate and provides thermal isolation between the substrate and the supporting frame.

In the paragraph bridging pages 4 and 5 of the Final Rejection, the Examiner cites old case law purportedly arguing that "adapted to" is not a positive limitation. The Examiner's attention is directed to the Manual of Patent Examining Procedure (MPEP) §2173.05(g) which specifically indicates how an examiner is to treat Functional Limitations. In the last paragraph of this section, the MPEP repeats court decisions holding that the specific limitation "adapted to" is a limitation which serves "to precisely define present structural attributes of interrelated components of the claimed assembly" and relies upon *In re Venezia*, 189 USPQ 149 (CCPA 1976).

Accordingly, the claimed structure that "is adapted to" is a structural interrelationship that the Examiner must consider is required both the MPEP and the current Court of Appeals for

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the Federal Circuit decisions. The Examiner's ignoring of the MPEP and its cited decisions (and his failing to properly construe the claims) is reversible error.

**Error #3. The Examiner fails to understand the Vig reference**

In attempting to read the Vig reference on Applicants' claimed invention, the Examiner simply fails to identify the elements recited in Applicants' independent claim 1 or claims dependent thereon. While the Examiner correctly identifies a resonator element 1 in the Vig reference, there is no disclosure that this is "fixably attached to a supporting frame."

The Examiner suggests that item 2 is the claimed "supporting frame" (the Vig reference clearly teaches that item 2 in Figure 4 is a "thin film support"). The Examiner suggests that this is disclosed in the abstract, but there is no discussion of any supporting frame or structure in the Vig abstract.

Assuming for the purpose of argument that the thin film 2 is a "supporting frame" of some sort, the Examiner completely ignores the claim 1 requirement of a "mounting means" for mounting the supporting frame on a substrate and that the "mounting means" also provides thermal isolation between the substrate and the supporting frame.

Firstly, it is noted that the Examiner does not identify any structure in Figure 4 of Vig to be the "mounting means" or any other structure which mounts the supporting frame (thin film 2) on a substrate (40). Does she contend that structures 5 and 6, i.e., "top electrodes 5 and bottom electrodes 6" are the "mounting means" or are they the "substrate"? Does the Examiner also contend that these electrodes somehow also provide thermal isolation between the substrate (electrodes 5 and 6) and the supporting frame (thin film 2)? The Examiner doesn't indicate what structures correspond to the claimed elements.

The Examiner's failure to identify structures which she contends falls within the scope of Applicants' claimed elements is fatal to her interpretation of the Vig reference.

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**Error #4. The Examiner errs in failing to identify where all claimed elements are disclosed in Vig or are arranged as in Vig**

In both the anticipation rejection under §102 and the single reference obviousness rejection under §103, the Examiner fails to indicate where all claimed elements and all claimed interrelationships between elements are disclosed in the Vig reference.

As noted above, if the Examiner contends that thin film support 2 is the claimed "supporting frame," then there is no identified structure anywhere in Vig which comprises Applicants' claimed "mounting means" (between the supporting structure and the substrate). If the thin film 2 is the "mounting means," where is the supporting frame which has the resonator element fixably attached thereto? Simply put, the Vig reference does not support any rejection of claim 1 under 35 USC §102 or §103 and therefore the Examiner's rejections thereunder are respectfully traversed.

The Court of Appeals for the Federal Circuit has noted in the case of *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick*, 221 USPQ 481, 485 (Fed. Cir. 1984) that "[a]nticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim." As noted above, the Examiner clearly fails to meet her burden of establishing that all claimed elements and all claimed interrelationships between elements are disclosed in the single Vig reference and therefore the rejection of claim 1 and all claims dependent thereon over the Vig reference is respectfully traversed.

Additionally, the Court of Appeals for the Federal Circuit has held that "the PTO has the burden under Section 103 to establish a *prima facie* case of obviousness." *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). "It can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references." None of the

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references teach the combination of elements of the supporting frame and the substrate with a mounting means therebetween.

As noted above, the Examiner simply fails to meet his burden of establishing a *prima facie* case of anticipation, as well as a *prima facie* case of obviousness over the Vig reference.

#### Error #5.

Claims 5-7 and 18 stand rejected under 35 USC §103 as being unpatentable over Vig when combined with various secondary reference and claims 15, 21 and 22 stand rejected under 35 USC §103 as being unpatentable over Vig. In no instance does the Examiner allege that the secondary references teach or suggest Applicants' claimed mounting means and therefore each of these obviousness rejections suffers from the same failure on the Examiner's part as discussed above in section 4 and therefore the discussion therein is herein incorporated by reference.

The Examiner has simply failed to meet his burden of establishing a *prima facie* case of obviousness with respect to the rejection of claims 5-7, 15, 18, 21 and 22 and any further rejection thereunder is respectfully traversed.

#### SUMMARY

The error in the Examiner's failure to adhere to the claim construction requirements of paragraph six of 35 USC §112 as well as the MPEP is apparent. The failure to identify, especially when challenged, the prior art structures that she believes corresponds to the claimed elements such as the "resonator" on a "support frame" and a "mounting means" supporting and thermally located "between said substrate and said support frame" is reversible error.

As a result of the above, there is simply no support for the rejection of Applicants' independent claim 1 or claims dependent thereon under 35 USC §102 and/or §103. Applicants respectfully request that the Pre-Appeal Panel find that the application is allowed on the existing claims and prosecution on the merits should be closed.